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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,936	01/11/2002	Michael Mulligan	NOKM.015CIP	9432
7590 03/10/2008 Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425				
EXAMINER DOAN, DUYEN MY				
ART UNIT 2152		PAPER NUMBER		
MAIL DATE 03/10/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/043,936

Applicant(s)

MULLIGAN ET AL.

Examiner

DUYEN M. DOAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
- Paper No(s)/Mail Date 12/11/2007.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/26/2007 has been entered.

Claims 1-6, 8-41 are amended for examination.

Response to Arguments

Applicant's arguments with respect to claim 41 under 35 U.S.C. 101 has been fully considered and is persuasive. The rejection of claim 41 has been withdrawn.

Applicant's arguments with respect to the rejections under 35 U.S.C. 102 (e) and 103(a) have been considered but are moot in view of the new ground(s) of rejection.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 41 cites, "computer readable medium..." nowhere in the applicant's disclosure mentioned about "computer readable medium", on page 47, lines 5-12 talked about computer usable medium, not computer readable medium.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 6, 8, 11, 18-22, 25, 27-39, 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Vilander et al (us pat 6,553,219) (hereinafter Vil).

As regarding claim 1, Vil discloses one or more terminals operable in a network (see Vil, figure 1, device 9) ; a network infrastructure comprising one or more network systems (see Vil figure 1, base stations, RNC6, access server 8, gateway device 7) ; at least one network-enabled application operating within a service provision infrastructure for use by one or more of the terminal (see Vil figure 1, access server 8 allows to access to internet); and at least one network service broker comprising a at least one terminal-coupled broker to communicate directly with one or more terminals (see Vil RNC 6, also see col.4, lines 9-23, base stations connect between terminal 9 and access server 8 allow terminal 9 to access services available at ISP) and loosely-coupled interface exposed to the service provision infrastructure for brokering added-value

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network services from one or more of the terminals and network systems to the service provision infrastructure (see Vil col. 4, lines 19-27, base stations and RNC connected to the access server 8 to access the internet services, the interface is inherently exist between the base station and the access server in order for the two to communicate).

As regarding claim 2, Vil discloses a loosely-coupled standardized interface (see Vil col. 4, lines 19-27, RNC connected to the access server 8 to access the internet services, the interface is inherently exist between the base stations/RNC and the access server in order for the two to communicate).

As regarding claim 6, Vil discloses wherein the network service broker comprises at least one network-coupled broker to communicate with one or more network elements in the network infrastructure (see Vil col.4, lines 9-21).

As regarding claim 8, Vil discloses the network service broker comprises at least one hybrid network service broker to communicate with one or more network elements in the network infrastructure and with one or more terminals (see Vil figure 1, base station and RNC communicates with terminal 9 and access server 8).

As regarding claim 11, Vil discloses location broker to access a terminal location service to allow a location of the terminal to be provided to the network enabled application (see Vil col.4, lines 56-65).

As regarding claim 18, the limitations of claim 18 are similar to limitations of rejected claim 1, therefore rejected for the same rationale.

As regarding claim 19, Vil discloses wherein facilitating access via the loosely-couples network service broker interface comprises making the service available to the applications via the loosely-coupled network service broker interface using any of a plurality of service provision infrastructure technology (see Vil co.4, lines 43-65).

As regarding claim 20, Vil discloses communicating between the network service broker and the network infrastructure regardless of technological differences in one or more different network elements operating within the network infrastructure (see Vil co.4, lines 43-65).

As regarding claim 21, Vil discloses communicating between the network service broker and the network infrastructure regardless of technological differences in one or more network infrastructure network systems having different access methods (see Vil col.2, lines 53-63).

As regarding claim 22, Vil discloses wherein the one or more network infrastructures collectively implement a plurality of different network technologies, and wherein the network service broker accommodates technological variations between the

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network technologies and service provision infrastructure technologies (see Vil col.2, lines 53-63).

As regarding claim 25, Vil discloses providing at least one network service broker comprises providing a plurality of network service brokers, and wherein each of the plurality of network service brokers comprises a loosely-coupled interface exposed to the service provision infrastructure for communication there between (see Vil col. 4, lines 19-27, RNC connected to the access server 8 to access the internet services, the interface is inherently exist between the base stations/RNC and the access server in order for the two to communicate).

As regarding claim 27, Vil discloses a fix network (see Vil figure 1, network 4).

As regarding claim 28, Vil discloses a wireless network (see Vil figure 1, network 1).

As regarding claim 29, Vil discloses utilizing value-added service by service by the applications as arranged by the network service broker (see col.4, lines 20-27).

As regarding claim 30, Vil discloses the limitations of claim 18 are similar to limitations of rejected claim 1, therefore rejected for the same rationale.

As regarding claims 31-32, Vil discloses the limitations of claim 31-32 are similar to limitations of rejected claims 19-22, therefore rejected for the same rationale.

As regarding claims 33-39, 41, the limitations of claims 33-39, 41 are similar to rejected claims 1-2, 6, 8, 18-22, therefore rejected for the same rationale.

Claims 9-10, 12-17, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vilander et al (us pat 6,553,219) (hereinafter Vil) in view of Rosenberg et al (us 2003/0013434) (hereinafter Rosenberg).

As regarding claim 9, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose wherein the network service broker is an authentication broker.

Vil teaches an authentication broker (see pg.2, par 0020-0024).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg to the system of Vil to include an authentication broker, because by having an authentication broker would ensure data security and billing purposes for the system (see Rosenberg pg.2, par 0020-0024).

As regarding claim 10, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose charging broker to access a charging/billing service in connection with use of the network-enabled application.

Rosenberg teaches a charging broker to access a charging/billing service in connection with use of the network-enabled application (see Rosenberg, pg. 2, par 0020-0024).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg to the system of Vil to include the charging broker, because it would keep track of the user' usage and bill the user according (see Rosenberg pg.2, par 0020-0024).

As regarding claim 12, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose content ordering broker to store subscription information to a profile register and to verify subscription intentions of an end-user of the terminal.

Rosenberg teaches content ordering broker to store subscription information to a profile register and to verify subscription intentions of an end-user of the terminal (see Rosenberg pg.2, par 0018-0024).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg to the system of Vil to include the content ordering broker, because it would keep track of content of end user

ordering and bill the user base on the ordered content (see Rosenberg pg.2, par 0018-0024).

As regarding claim 13, Vil-Rosenbergh discloses network service broker is a presence broker to access a presence service to allow user presence information to be provided to the network-enable application (see Rosenberg pg.2, par 0018-0024).

As regarding claim 14, Vil-Rosenbergh discloses the network service broker is a client provisioning broker to broker provisioning of mobile terminals (see Rosenberg pg.2, par 0018-0024).

As regarding claim 15, Vil-Rosenbergh discloses network service broker is a notification broker to facilitate pushing content to the terminals (see Rosenberg pg.2, par 0018-0024).

As regarding claim 16-17, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose the network service broker is a privacy broker to access end-user privacy information and to control which information other brokers will provide to the service provision infrastructure.

Rosenberg teaches the network service broker is a privacy broker to access end-user privacy information and to control which information other brokers will provide to

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the service provision infrastructure (see Rosenberg pg.2, par 0020-0024; pg.4, par 0052 to 0057).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg to the system of Vil to include the privacy broker because it would allow the allow the system to authenticate the user by accessing the end user privacy information such as username and password (see Rosenberg pg.2, par 0020-0024).

As regarding claim 26, Vil-Rosenbergh discloses at least some of the plurality of network service brokers intercommunicates (see Rosenberg pg.2, par 0020-0024).

Claims 3-5, 23-24, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vilander et al (us pat 6,553,219) (hereinafter Vil) in view of Hagirahim et al (us 2002/0154642) (hereinafter Hag).

As regarding claim 3, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose the interface is defined in XML.

Hag teaches interfaces are defined in XML (see Hag page.2-3, par 0018, XML).

It would have been o obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Hag to the system of Vil to define interface in XML because of the flexibility of XML which allows the user to define their own element.

As regarding claim 4, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose web service interface.

Hag teaches the web service interface (see Hag page.2-3, par 0018, 0031).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Hag to the system of Vil to include web service interface for the purpose of allowing the terminal to access to the web.

As regarding claim 5, Vil discloses the invention substantially as claim in claim 1, but does not explicitly disclose the interface is single loosely-coupled web service interface exposed to the service provision infrastructure.

Hag teaches the interface is single loosely-coupled web service interface exposed to the service provision infrastructure (see Hag page.2-3, par 0018, 0031).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Hag to the system of Vil to include web service interface for the purpose of allowing the terminal to access to the web.

As regarding claims 23-24, the limitations of claims 23-24 are similar to limitations of rejected claims 4-5, therefore rejected for the same rationales.

As regarding claim 40, limitations of claim 40 are similar to limitation of claim 1 which rejected under Vil, however Vil does not disclose web services based interface having XML schema.

Hag teaches web interfaces are defined in XML (see Hag page.2-3, par 0018, XML).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Hag to the system of Vil to define interface in XML because of the flexibility of XML which allows the user to define their own element.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUYEN M. DOAN whose telephone number is (571)272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. M. D./
Examiner, Art Unit 2152

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